ANTHROPOLOGY.[1]

LANGUAGE MAP OF AMERICA.—In the *Geographical Magazine* for March, 1878, the statement is made that Mr. A. H. Keane is collecting materials for a language map of America. We cannot speak from personal experience concerning the difficulties of such an undertaking for South America; but we can assure any one who attempts the task for North America that the impediments are almost insurmountable. The Smithsonian Institution has for twenty-five years zealously collected vocabularies and other linguistic material. These have all been placed in the hands of Major J. W. Powell, who has called to his aid most of the eminent philologists of our country in adding to and perfecting what has been already gathered. The first volume of "Contributions to American Ethnology," already published, is the harbinger of a series which, when completed, will exhibit the linguistic geography of our aborigines. Dr. Berendt is doing similar work for Middle America.

THE DAVENPORT TABLET.—With respect to the Davenport tablet, concerning which a mild caution was ventured in the May NATURALIST, Mr. J. Duncan Putnam, corresponding secretary of the Davenport Academy, writes: "This tablet was found by Mr. Gass, and is believed to be just as genuine as those found a year ago, and they appear to be just as genuine as the copper axes, stone pipes, sea shells, etc., found along side of them. They may be all "got up," but if so the evidence is very strong that they were not done by any "wag" of the present generation. A full account of this last find will be printed in our next number of *Proceedings*, now in press."

ANTHROPOLOGICAL NEWS.—The Rev. Stephen Bowers is lecturing in the western cities upon Explorations in Southern California. The labors of Mr. Bowers were confined to that portion of the state bordering on the ocean, and to the Santa Barbara islands. His contributions to the National Museum equal in value and number those of any of its numerous friends.

MR. J. D. McGUIRE, of Ellicott city, Maryland, in a letter to the Smithsonian Institution, speaks of a number of arrow-heads in his possession whose points have been polished apparently by design. As this is the first allusion to the subject of polished quartz arrow-points, the discovery of Mr. McGuire is very interesting. If the same phenomenon has been observed elsewhere we should be glad to know it.

THE Annual Report of the secretary of the Smithsonian Institution contains a detailed account of a forthcoming publication from the pen of Dr. Habel concerning the discovery of sculptured slabs at Santa Lucia Cotzumalhuapa, near the city of Gua-

[1] Edited by Prof. OTIS T. MASON, Columbian College, Washington, D. C.

temala. Several years ago Dr. Habel resigned a lucrative medical practice in New York to visit Central America. While in Guatemala he came upon these interesting remains which he cleared away at great expense of time and labor, and the sculptures of which he copied with the greatest accuracy. These slabs resemble the best sculptures of Mexico and Central America in the objects represented, and in the barbaric exhuberance of ornament. There are two features which are almost unique, the symbol for speech, and for numerals. The speech symbol consists of a vine-like ridge proceeding from the mouth or neck of the suppliant or of the divinity and winding about in various shapes. The staff or ridge is adorned with nodes and trefoils in such positions and groups as to give great plausibility to Dr. Habel's belief that the ornamented staff indicates the very desire or thought of the speaker. The numeral symbol consists of rows of rings accompanied by parallel and cross lines. The beauty and uniqueness of these sculptures will make Dr. Habel's paper one of great interest and value. The slabs were purchased, subsequently to Dr. Habel's visit, by Dr. Bastian, and will be removed to Berlin.

THE *Archiv für Anthropologie*, part 4, for 1877, is one of the most valuable numbers of that periodical which have appeared. In addition to the usual amount of original matter, an account of which will be found below, a series of papers is commenced entitled, "Die anthropologischen Sammlungen Deutschlands: ein Verzeichniss des in Deutschland vorhandenen anthropologischen Materials nach Beschluss der deutschen anthropologischen Gesellschaft zusammengestellt unter Leitung des Vorsitzenden der zu diesem Zwecke ernannten Commission." The first paper of 68 pages is devoted to the anthropological collection of the anatomical museum of the University of Bonn, and contains the description of 446 human and simian skeletons and skulls. The papers are so arranged that they can be detached from the *Archiv* and subsequently bound in a separate volume. It makes one sigh for the spirit of Jeffries Wyman to think how little the anatomists of our country are doing with the rich material scattered on every hand.

THE following papers have come under our notice: Der Nachfolger des Onondaga-Riesen, C. Rau, *Archiv*, vol. x, No. 4; Prehistoric Ruins in Dade Co., Missouri, *Western Review*, April; The Blackwater, Missouri, Mounds, *id.*; Soapstone Quarry in Providence county, R. I., *id.*; L'ancienneté de l'homme au Mexique, *La Nature*, March 23d; Brandsford's Ausgrabungen auf Ometepec, *Globus*, xxxi, No 21; Die Mineralogie als Hülfswissenschaft für Archäologie, Ethnographie, u. s. w., mit specialler Berücksichtigung mexicanischer Sculpturen, II, H. Fischer, *Archiv*, x, 4; Lebensweise und Geräthe der süd-chilenischen Indianer, *Correspondenzblatt*, 1878, I.

Foreign papers of general interest are: Finländische Archäologische Literatur von 1745 bis heute, Dr. J. R. Aspelin in Helsingfors, *Archiv*, x, 4; Mittheilungen aus der Anthroplogischen Literatur Belgiens im Jahre 1876, Prof. L. von der Kindere, Brüssel, *id.*; Mittheilungen der russischen Literatur über Anthropologie, Dr. Ludwig Stieda, *id.*; Archæological Researches at Carnac, in Brittany, James Miln (David Douglas, Edinburgh); Ueber die achte Jahresversammlung der deutschen anthropologischen Gesellschaft, Graf Wurmbrand, *Mittheilungen* der Anthropologischen Gesellschaft in Wien, 1877, 10; Ueber neue Ausgrabungen auf den alten Gräberstätten bei Hallstatt, Dr. Ferd. von Hochstetter, *id.* 11; Zur Ethnographie Noricums, Dr. Fligier, *id.* 10 (a very scholarly paper made more valuable by the abundance of references to authorities); Die Ethnographie der Balkan-Halbinsel im 14 und 15 Jahrhundert, Prof. G. Hertzburg, Petermann's *Mittheilungen*, 1878, iv; Die Anfänge des Staats-und Rechtslebens, *Das Ausland*, April 1st; Growth of Ideas and Customs, E. B. Tylor, a lecture before the London Institution April 11th; Die Urgeschichte der Menschheit, Otto Caspari, 2d edition, Leipzig; On the Human Hair, Prof. Schwalbe, *Correspondenzblatt*, 1877, 2; On the Influence of Climate upon the Development of Art, especially Architecture, Prof. Portlage, *id.*

INDIAN FOOD CUSTOMS.—When an Indian is out of food he goes to those who have plenty, and it is considered a breach of etiquette not to feed the hungry. The provident are often imposed upon in this way. The Indians think it very strange that some whites have a superabundance of food while others have none at all. The females provide most of the food. They are the gatherers of nuts, seeds, roots and fruits, and convert them into bread and mush, while the men provide the meat. The labor of collecting these vegetable products is very great, the women being compelled to wander miles from their homes to obtain them. They are often seen on their homeward march with astonishing loads, so bulky at times as to conceal them entirely. They wander about all day in the grain fields picking up head by head until they have secured a load. A merchant of Tucson informed me that he had bought from some Papago women three sacks of wheat secured in this manner. The Indians formerly made two kinds of bread, one is a small flat cake or biscuit baked in the ashes, the other is as thin as a wafer, and made in the following manner. Meal or flour from any native product is mixed with water and a little salt to the consistency of dough. The cook then takes a piece in her hand, pulls it and flattens it out until a large, thin, round cake is formed. This is baked on a flat, hot stone, first on one side and then on the other. Much of their flour and meal is eaten as mush or gruel, which they relish very much.—*Edward Palmer.*

FISH-HOOKS OF THE MOHAVE INDIANS.—Questioning some old Indians about their native fish-hooks, I found that they used the spine of a cactus for this purpose. Having made a bargain with one to allow me to see him make the hooks, he returned in a few hours with a plant and a number of the spines of *Echinocactus wislizeni.* He commenced by placing the spines in water for a short time in order to render them pliable, at the same time wrapping the thumb and first finger of his right hand with rags. He then made a small torch about half the size of one's little finger by twisting some pieces of rags together rather tightly. Selecting a spine from the water and placing it between the ends of the wrapped thumb and finger, the torch was lit and held in the left hand close to the spine, the workman dexterously changing the position so as to impart the same amount of heat to all portions at once. Occasionally he moistened the spine in his mouth. By this application of heat and moisture he tempered the spine, and at the same time applying a gentle pressure by the end of the wrapped finger he was soon able to produce a very fair and strong hook. As soon as a sufficient curvature is obtained, it is secured by fastening a string from the point to the shaft.

The fish of the Colorado river, eaten by the Mohaves, do not nibble the bait, but bolt it, hook and all, and are killed by the wounds which are made in their gills. This cactus-spine hook would be of no use in catching fish that nibble, as there is no barb. The Indians fasten the bait below the hook, before throwing it into the water. The iron hooks obtained from the whites now take the place of their old-fashioned ones.—*Edward Palmer.*

INDIAN STEATITE DISHES.—A very interesting discovery has recently been made by Mr. H. N. Angell, of Providence, R. I., showing how the Indians formerly manufactured steatite dishes. As he was quarrying about a ledge of rocks near his home, early in the month of February, he came upon a bed of soapstone, which bore evident traces of having at one time been artificially worked. Cart loads of steatite dust and chippings were removed before the ledge could be uncovered, when it presented a very peculiar appearance, being covered by protuberances and depressions. A number of finished vessels were obtained and many more in a partial state of completion. The pots were first rudely carved out of the rock with slate or stone knives and chisels, bottom-side up, and were then removed from the mass by inserting wedges beneath them, after which they were hollowed out. Mr. Angell states that "the soap-stone bed, as now uncovered, is about 30 by 90 feet in extent, and all of the surface has been worked. We found by excavating in other places in the vicinity, stone hammers, chisels and sledges that will weigh from 50 to 150 pounds. We also found a rudely wrought stone which resembles a plough and which will weigh over 100 pounds." The

bed of steatite had been lowered several feet by the removal of the stone, and it is certain that great numbers of vessels were fashioned at this quarry.—*E. A. Barber.*

Surgeon John H. Janeway has presented to the Army Medical Museum five crania from the shell-heaps near St. Augustine, Florida. These crania are especially remarkable for the position, shape and size of the foramen magnum, and for the great size of the basilar process, occasioned by the extremely backward position of the foramen magnum. The museum has also received from Second Lieutenant C. A. H. McCauley a cranium from the ruins of Mesa Morasis, on the Rio de los Animos, near its mouth. This is the fourth cranium from these cliff structures, furnishing a good beginning for a comparative study. It is to be hoped that this splendid collection, now under the charge of Dr. Otis, will be fostered by anthropologists in all parts of our country. The Quartermaster's Department have orders to transmit all specimens to Washington, free of charge.

Mr. Spofford, of the Congressional Library, is now publishing a complete catalogue in one alphabet of everything in the library, with titles complete, including the Smithsonian additions, under the names of societies.

In the *Magazine of American History* for February, Dr. Charles Rau publishes the paper on the Dighton Rock Inscription which he read before the American Anthropological Society last September.

Mr. E. A. Barber communicates the fact that in the "Museum of the Pennsylvania School of Industrial Art," in the Memorial Hall, Philadelphia, is a collection of relics from the Swiss Lake Dwellings. We shall be glad to publish the location and special character of public and private collections of merit in our country.

The following works and papers have appeared: Mound Explorations in South-eastern Missouri (in Madrid county), by C. Crosswell, Trans. of the Acad. of Sciences of St. Louis, Vol. iii, No. 4; Antiquity of Caverns and Cavern Life in the Ohio valley, by Prof. N. S. Shaler, Boston Soc. of Nat. History; Les Esquimaux (based on the presence of a group of them in the Jardin d'Acclimation de Paris), *Révue Scientifique*, Jan. 26th; Colored People considered scientifically and socially, by D. H. Jacques, *Phrenological Journal*, Dec.; The Southern Negro as he is, by George R. Stetson (A. Williams & Co.); Cuban Antiquities: the Caneys of the Dead, by Antonio Bachiller, *Magazine of American History*, Dec.; The Second Conquest of Peru, by C. P. Mackie, *Penn Monthly*, Feb.; Pottery: How it is Made, by George Ward Nichols (G. P. Putnam's Sons); A Hand-book of Ceramic Art, by M. S. Lockwood (*id.*); Bibliotheca Americana, by Robert Clarke & Co., Cincinnati.

FOREIGN.—An interesting course of lectures has been inaugurated in connection with the new museum of ethnography at Paris.

Nearly every afternoon is appropriated to a discourse by some eminent savant on topics illustrated by the collections in the museum.

The German Emperor has presented to the ethnographical department of the Royal Museum at Berlin, a collection of weapons from Java, Sumatra, Borneo, Celebes, Flores, Amboyna and other islands, made by Herr Erdmann, German Consul at Samarang, Java.

On Friday, February 15th, the Rev. W. E. Cousins read a paper before the London Philological Society on Malagasy, the language of Madagascar, a short sketch is given in *The Academy* for March 2d.

Dr. Stuart Eldridge sends a copy of his pamphlet on the crania of the Botans of Formosa, read before the Asiatic Society of Japan, March 14th, 1877. The first few pages are occupied with a résumé of the science of craniology. The researches of Dr. Eldridge were made on four skulls. The Botans, or Motans, are one of the aboriginal tribes of Formosa, having a fine physical development, and distinguished by the following characteristics: They are courageous, frank and impressible; straight haired; complexion varied, but always of a brown tint, never black; having some knowledge of agriculture, cultivating tobacco, root-crops and rice; domesticating buffaloes, pigs, dogs and poultry; living under a patriarchal organization; fond of the chase; having some slight knowledge of certain arts, and a rude form of religion, the cultus of which is, at least to some extent, in the hands of priestesses who are highly reverenced. There are no signs of artificial distortion in any of the skulls; when held at arm's length the malar bones are visible on either side, and all are dolichocephalic. In all, the upper edges of the zygomata are somewhat convex, the temporal ridges are strongly marked, the processes are highly developed, the mastoids are about the average, the external auditory foramina are oval, the arch of the palate is low and flat, the external opening of the nose is large, the frontal sinuses are small, and the ethmoidal ridge of the frontal large and prominent. They are almost uniformly orthognathous. The orbits in Nos. 1 and 3 are somewhat square in outline, while in No. 2 the orbit is elliptical, the axis being directed downward and outward. The occipital foramina of Nos. 1 and 4 are rather more oval than common, those of Nos. 2 and 3 being about normal in shape. The sutures of Nos. 1, 2 and 4 are distinct and ununited. In No. 3 all the sutures save the squamous and a part of the lambdoidal are obliterated. The pamphlet closes with a tabular view of the measurements of the skulls according to the scheme of Huxley, from which a few are extracted: Length 7, 6.95, 7.15, 7.02 inches for the four skulls respectively; breadth 5.45, 5.35, 5.38, 5.28; height 5.30, 5.27, 5.52, 5.26; cephalic index .78, .77, .75, .75; facial angle 76.3°, 80.5°, 84.3°; capacity 84.82, 91.34, 83.43, 75.90 cubic inches.